# TECHNICAL NOTES

LAKE STATES FOREST EXPERIMENT STATION
U.S. DEPARTMENT OF AGRICULTURE · · FOREST SERVICE

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## Logging Operations Provide Winter Feed for Deer

Observations made for a number of years on the Argonne Experimental Forest in northeastern Wisconsin have indicated that winter logging operations, particularly in the hardwood-hemlock type and in white-cedar swamps, attract large numbers of deer which browse the tips and needles of the recently felled trees. As many as 27 deer have been seen on logged tracts as small as 20 acres in size.

Such supplemental food often amounts to three or four hundred pounds per acre in the hardwood-hemlock type and enables many deer to overwinter more successfully; it saves some of them from actual starvation, especially in areas where natural browse is scarce. Furthermore, such logging operations create additional low browse within reach of deer in the form of sprouts and accelerate the growth of seedlings.

A recent survey on the Argonne Experimental Forest showed a striking difference in the relative population of deer in several types of logging situations, using deer crossings per mile of logging road as an index of comparative use.

| Type of second-growth hardwood cutting | Deer crossings per mile of logging road |
|---|---|
| February-March cutting, 1954, partial cut | 330 |
| Partial cut 2 years of age | 51 |
| No logging since about 35 years ago | 5 |
| Clear cut 2 years ago | 0 |

In the 330 deer crossings per mile noted in recent logging operations all of the tracks had been made within a week of the date of observation, March 18, 1954. Deer made considerable use of the 2-year-old partial cutting area, but very little use of the area logged some 35 years ago. The area clear cut 2 years ago had no tracks on the date of observation, probably because the seedling browse was too short to appear above the 10 to 14 inches of snow covering the area. Lack of cover and shelter also may have been a contributing factor.

These observations indicate that sustained-yield forest management, involving systematic logging operations every winter, may be a prime factor in providing an abundance of food for deer, and in enhancing the multiple-use concept of forestry.


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